

AMENDMENTS TO ABSTRACT

A' An apparatus for verifying a logic function of a semiconductor chip in a logic chip emulation environment ~~where a processing engine and a target interface engine interact with each other.~~ The apparatus in accordance with the present invention generally includes a processing engine for executing a software algorithm corresponding to the logic design of the target chip, and a target interface engine interfacing with the target system for transmitting/receiving pin signals to/from the target system. The software algorithm has ~~one~~ one or more software variables variable(s), and the transmission/reception of the pin signals by the target interface engine occurs with the execution of the software algorithm by the processing engine. The software ~~variable~~ variable(s) and the pin signals are time-variant ~~with the~~ during execution of the algorithm. The processing engine ~~comprises~~ includes means for finding correspondence between the software ~~variables~~ variable(s) and the pin signals at a predetermined time, so that the values of the software variables and the values of the hardware pin signals corresponding in time thereto ~~can be~~ are monitored in synchronization with each other.